



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,058	01/10/2002	Wayne T. Heverly	6911-3	6554

21324 7590 08/01/2003
HAHN LOESER & PARKS, LLP
TWIN OAKS ESTATE
1225 W. MARKET STREET
AKRON, OH 44313

EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,058

Applicant(s)

HEVERLY, WAYNE T.

Examiner

David E. Bochna

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 11 and 23 are objected to because of the following informalities:

Claims 1, 11 and 23, it is unclear which household cleaning appliances are considered "major".

Claim 5, "fit-ting" should be "fitting".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-10 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese patent 9,3030,624.

In regard to claim 1, Japanese patent 9,3030,624 discloses, in combination, a major household cleaning appliance A having at least one internal component d, the at least one internal component having at least one male fitting a thereon:

and

a tube H having two ends, at least one of the ends having a quick connect fitting 1 thereon, the quick connect fitting releasably engaging the at least one male fitting a.

In regard to claim 3, the tube H is a drain tube.

In regard to claim 4, the tube H is corrugated.

Art Unit: 3679

In regard to claim 5, Japanese patent 9,3030,624 discloses a quick connect assembly for use in household cleaning appliances, comprising:

A quick connect fitting having a quick connect retainer sleeve 1; and a quick connect retainer (annular indentations below where 23 is pointing in fig. 3) integrated into the sleeve,

The quick connect fitting being adapted to be removably attached to a fitting a in the household cleaning appliance A.

In regard to claim 6, the fitting 1 is fabricated from plastic.

In regard to claim 7, Japanese patent 9,3030,624 discloses a quick connect assembly comprising a length of corrugated tubing;

A quick connect retainer sleeve 1 integral to the corrugated tubing H; and

A quick connect retainer (annular indentations below where 23 is pointing in fig. 3) integrated into the sleeve 1.

In regard to claim 8, the quick connect retainer sleeve 1 is monolithic with the corrugated tubing H.

In regard to claim 9, the quick connect assembly is adapted to be removably attached to the fitting a.

In regard to claim 10, the quick connect assembly is fabricated from plastic.

In regard to claim 23, Japanese patent 9,3030,624 discloses, in combination, a household cleaning appliance A having at least one internal component d, the at least one internal component having at least one male fitting a thereon; and

A tube H having at least a portion formed of thermoplastic elastomer, at least one end of the tube being formed of the thermoplastic elastomer, the at least one end of the tube being

Art Unit: 3679

formed of the thermoplastic elastomer having a quick connect fitting 1 thereon, the quick connect fitting retainingly and releasably engaging the at least one male fitting a, the tubing adjacent the quick connect retainer sleeve having a smaller diameter (annular indentations below where 23 is pointing in fig. 3) than the quick connect retainer sleeve 2a, the tubing smaller diameter portion sealingly engaging the at least one male fitting a.

4. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by EP Publication 595,742.

EP Publication 595,742 discloses a quick connect tubing assembly comprising:

A length of corrugated tubing 5;

A quick connect retainer sleeve 2 monolithically formed with the corrugated tubing 5;

and

a quick connect retainer integral with the sleeve, the quick connect retainer comprising: an outwardly extending flange (flange just to the left of 14), an inwardly extending flange (flange just to the right of 13), and an intermediate wall portion (portion of wall measured by the arrows and L) connecting the outwardly extending flange and the inwardly extending flange.

5. Claims 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonnema et al.

In regard to claim 12, Bonnema et al. discloses a corrugated tubing assembly comprising:

A length of corrugated tubing 16;

A quick connect sleeve 15b monolithic with one end of the corrugated tubing;

And

Art Unit: 3679

A quick connect retainer 23 attached to the interior of the quick connect sleeve 15b, the quick connect retainer having a plurality of inwardly extending resilient fingers 28, 29, the resilient fingers being adapted to retainingly and releasably engage a male fitting 15.

In regard to claim 13, further comprising an elastomeric sealing ring 36 adapted to sealingly engage the male fitting.

6. Claims 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wood et al.

In regard to claim 18, Wood et al. discloses a method of removably attaching tubing 21a to household cleaning appliances, the household cleaning appliance having at least one fitting, the method comprising the step of;

providing a quick connect assembly 20A (fig. 9) integral with a length of tubing 21A, the quick connect assembly comprising: a quick connect retainer sleeve 56; and a quick connect retainer 30A, 29A integral with the sleeve 56; and

retainingly and removably attaching the quick connect assembly 23A to the fitting 20A.

In regard to claim 19, the quick connect retainer includes a plurality of flexible fingers 29A, 30A and the step of retaining and removably attaching the quick connect assembly includes flexing the plurality of flexible fingers 29A, 30A with a radially outwardly extending flange 33A, 34A on the at least one fitting.

7. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rea et al. '279.

In regard to claim 20, Rea et al. discloses a length of tubing (tube that would be put on 14), at least a portion of the tubing including an end of the tubing, being formed from a thermoplastic elastomer;

a quick connect sleeve 14 monolithic with the end of the length of tubing formed of

Art Unit: 3679

thermoplastic elastomer; and

a quick connect retainer 16 integrated into the quick connect retainer sleeve.

In regard to claim 21, the quick connect retainer comprises: an outwardly extending Flange 16i, an inwardly extending flange 16b; and an intermediate wall portion 16k connecting the outwardly extending flange with the inwardly extending flange.

In regard to claim 22, the quick connect retainer includes a plurality of inwardly extending resilient fingers 16e, the resilient fingers being adapted to retainingly and releasably engage a male fitting 10.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 9,3030,624.

Japanese patent 9,3030,624 discloses the combination as described above, but does not disclose a plurality of components and tubes. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combination Japanese patent 9,3030,624 to include a plurality of components and tubes because duplicating the components of a prior art device is a design consideration within the skill of the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Art Unit: 3679

10. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rea et al. '279 in view of Kutnyak et al.

In regard to claim 12, Rea et al. discloses a corrugated tubing assembly comprising:

A length of tubing (tube placed over portion 14);

A quick connect sleeve 14 monolithic with one end of the tubing;

And

A quick connect retainer 16 attached to the interior of the quick connect sleeve, the quick connect retainer having a plurality of inwardly extending resilient fingers 16e, the resilient fingers being adapted to retainingly and releasingly engage a male fitting 10. However, Rea et al. does not specifically disclose that the quick connect sleeve is connected to corrugated tubing. Kutnyak et al. teaches that is desirable to connect quick connect sleeves 40 to corrugated tubes. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to also attach the quick connect sleeve of Rea et al. to corrugated pipes, because doing so was advantageous and common in the art, as demonstrated by Kutnyak et al.

In regard to claim 13, further comprising an elastomeric sealing ring 18 adapted to sealingly engage the male fitting 10.

In regard to claim 14, the quick connect sleeve has a stepped circular interior comprising: a quick connect retainer portion 14i having a first inner diameter; a seal portion 14h having a second diameter, the second diameter being smaller than the first diameter, and a seal retaining portion 14g having a third diameter, the third diameter being smaller than the second diameter, the seal portion 14h being between the quick connect retainer portion 14i and the seal retaining portion 14g, the seal retainer portion being monolithic with the length of corrugated tubing, the

Art Unit: 3679

quick connect retainer engaging the quick connect retainer portion of the stepped circular interior.

In regard to claim 15, the elastomeric sealing ring 18 fits radially within the inside diameter of the seal portion of the stepped circular interior and fits axially against a shoulder 14m formed between the seal portion of the stepped circular interior and the seal retaining portion of the stepped circular interior.

In regard to claim 16, the quick connect retainer has an annular shape with an outwardly extending flange 16i at one end thereof and an inwardly extending flange at the other end thereof, the outwardly extending flange 16i engaging a free end 14j of the quick connect sleeve, the inwardly extending flange 16b engaging a shoulder formed between the quick connect retainer portion of the stepped circular interior and the seal portion of the stepped circular interior.

In regard to claim 17, the quick connect retainer inwardly extending flange 16b is formed of a plurality of discontinuous flange sections.

Conclusion


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Siferd et al., Goddard, Claes et al., Clase et al. '138, Bonnema et al., Japanese Patent 2,002,011,283, Japanese Patent 9,013,460, Japanese Patent 579,581, Japanese Patent 1,283,495 and Japanese Patent 60,185,596 all disclose similar couplings common in the art.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

Art Unit: 3679

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

A handwritten signature in black ink, appearing to read "David Bochna", with a stylized flourish at the end.

David Bochna
July 25, 2003